

**VALUE ENGINEERING CHANGE PROPOSAL**  
**MISSOURI DEPARTMENT OF TRANSPORTATION**

☒ Conceptual Proposal      ☐ Final Proposal

Date 8/16/10

Contract ID 090925-902

Job No. J9B0801I

County Texas

Rt. 60

Original Bid Cost \$423,143.00

Contractor L. Krupp Construction, Inc.

By Sean Kilian

Designed By \_\_\_\_\_

Phone (314) 280-0353

VECP# 10-86 (to be completed by C.O.)

VECP ☒ or PDVECP ☐

**1. Description of existing requirements and proposed change(s). Advantages/Disadvantages**

The original contract calls for building a crossover and constructing the new bridge deck in one stage. We are proposing to not build a crossover and to redeck the existing bridge in two stages utilizing temporary barrier and standard traffic control devices to complete the project at a cheaper cost to MoDOT. This would allow for existing westbound traffic to maintain two lanes throughout the length of the project and would only impact eastbound traffic.

**2. Estimate of reduction in construction costs.** \$78,917.00

**3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.**

The existing contract calls for completion in 50 calendar days and by December 1<sup>st</sup>, 2010. Due to the changes and required cure times, we are requesting 75 calendar days and the project completion date be moved to December 15, 2010. This may affect operations costs slightly.

**4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.**

8/23/10

(date)

**5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.**

9/3/10

(date)

(effect)

**6. Dates of any previous or concurrent submission of the same proposal.**

(date and/or dates)

Additional Comments:

**\*\* Portion Below This Line To Be Filled Out by MoDOT \*\***

Comments:

*Approval recommended*

*[Signature]*

Submitted By Resident Engineer

*26 August 10*  
Date

Comments:

*Approval recommended*



Approval  
Recommended



Rejection  
Recommended

*[Signature]*

District Engineer

*8/26/10*  
Date

Comments:



Approval  
Recommended



Rejection  
Recommended

Federal Highway Administration  
Required for FHWA Full Oversight Projects

Date

Comments:

*(SPD) 9/3/2010*



Approval



Rejection

*[Signature]*

State Construction and Materials Engineer

*9-20-10*

Date

Distribution: Resident Engineer, Project Manager, District Construction & Materials Engineer, State Construction & Materials Engineer, FHWA  
Value Engineering Administrator - MoDOT, P. O. Box 270, Jefferson City, MO 65102

**Proposal****L. KRUPP CONSTRUCTION, INC.****Job Code: SMK - MoDOT Call 902 - Route 60 - VALUE ENGINEERING****Description: Bridge deck removal and replacement on route 60 in texas county**

Line No.	Description	Quantity	Unit of Measure	Unit Price	Total Price
Subtotal Description					
0010	REMOVAL OF IMPROVEMENTS	1.00	LS	5,000.00	5,000.00
0050	BRIDGE APPROACH SLAB	212.00	SQYD	35.00	7,420.00
0060	BRIDGE ANCHOR SECTION, 6.5 FT. POSTS	2.00	EA	2,100.00	4,200.00
0070	TRANSITION SECTION, 6.5 FT. POSTS	2.00	EA	400.00	800.00
0080	TYPE A CRASHWORTHY END TERMINAL	2.00	EA	2,200.00	4,400.00
0090	IMPACT ATTENUATOR (19 SAND BARRELS)	1.00	EA	5,000.00	5,000.00
0100	REPLACEMENT SAND BARREL	5.00	EA	750.00	3,750.00
35	IMPACT ATTENUATOR (RELOCATION)	1.00	Each	1,000.00	1,000.00
0110	CONSTRUCTION SIGNS	386.00	SQFT	3.50	1,351.00
0120	ADVANCED WARNING RAIL SYSTEM	3.00	EA	95.00	285.00
0130	FLAG ASSEMBLY	36.00	EA	15.00	540.00
0140	CHANNELIZER (TRIM LINE)	85.00	EA	14.00	1,190.00
0150	TYPE III MOVEABLE BARRICADE	6.00	EA	135.00	810.00
0160	DIRECTIONAL INDICATOR BARRICADE	12.00	EA	25.00	300.00
0170	FLASHING ARROW PANEL	1.00	EA	400.00	400.00
0190	CHANGEABLE MESSAGE SIGN, COMM. FURNISHED	2.00	EA	1,500.00	3,000.00
0200	INSTALLING 'DRIVE SMART' SIGN	2.00	EA	100.00	200.00
0210	INSTALL 'POINT OF PRESENCE' 96 IN. X 48	2.00	EA	150.00	300.00
0220	TEMPORARY TRAFFIC BARRIER, CONT. FURN/RE	300.00	LF	25.00	7,500.00
0221	TEMP. TRAFF. BARRIER WITH ANCH. SYSTEM	130.00	LF	30.00	3,900.00
0222	RELOCATING TEMPORARY TRAFFIC BARRIER	300.00	LF	10.00	3,000.00
0223	RELOCATING TEMPORARY BARR. WITH ANCH. SYSTEM	130.00	LF	15.00	1,950.00
0230	MOBILIZATION	1.00	LS	59,000.00	59,000.00
34	PREFORMED REMOVABLE MARKING TAPE 4 IN., WHITE	1,000.00	LF	1.10	1,100.00
35	PREFORMED REMOVABLE MARKING TAPE 4 IN., YELLOW	1,000.00	LF	1.10	1,100.00
0240	4 IN. YELLOW ACRYLIC WATERBORNE PAINT	500.00	LF	1.00	500.00
0250	ACRYLIC WATERBORNE PAINT, 6 IN., WHITE	675.00	LF	1.00	675.00
0290	PAVEMENT MARKING REMOVAL	3,150.00	LF	0.40	1,260.00
0320	SEEDING - COOL SEASON MIXTURES	0.40	Acre	4,395.00	1,758.00
0350	REMOVAL OF EXISTING BRIDGE DECKS	4,482.00	SQFT	7.00	31,374.00
0360	SLAB ON STEEL	498.00	SQYD	300.00	149,400.00
0370	SAFETY BARRIER CURB	252.00	LF	84.00	21,168.00
0380	SLAB DRAIN	18.00	EA	240.00	4,320.00

8/23/2010 9:10 AM

Proposal				
Line No.	Description	Quantity	Unit of Measure	Unit Price
Subtotal Description				
0381	MECHANICAL BAR SPLICE	330.00	Each	40.00
0390	NON-DESTRUCTIVE TESTING	41.00	LF	75.00
GRAND TOTAL:				344,226.00

Proposal Certification

Submitted By: Séan Killan  
 Project Manager  
 L. Krupp Construction, Inc.  
 (314) 280-0353

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

# *L. Krupp Construction, Inc.*

August 25, 2010

Missouri Dept. of Transportation  
Willow Springs Project Office  
P.O. Box 345  
Willow Springs, MO 65793  
Attn: Phill Knott, R.E.

**RE: MoDOT Job #J9B0801I, Krupp Job #SK09415  
Route 60, Texas County  
Contract ID 090925-902**

Dear Mr. Knott:

As per your request, I am submitting the following revised bridge construction plans for your consideration:

- Stage 1: For stage one, we will route all traffic onto the right side of the bridge. We will utilize temporary traffic barrier placed 12' from the existing bridge barrier. We will sawcut the existing deck one foot outside of the temporary traffic barrier and remove the entire bridge deck left of that line. We will construct the left side of the bridge from the outside edge to the crown of the slab which is 16'4.5" wide. For the outside overhangs, we will utilize standard overhang brackets hung from Dayton C-25HD hangers. The right overhang dimension will be 5'6" from the centerline of girder #2. For this overhang, we will utilize Dayton C-89L Heavy Duty brackets hung from Dayton C-25HD hangers due to the dimension.
- Stage 2: For stage two, the temporary barrier will be moved 1' left of the stage 1 construction joint (roadway crown). The remainder of the bridge deck will be removed and reconstructed to a width of 24'4.5". As with the first stage, the exterior overhangs will utilize standard overhang brackets hung from Dayton C-25HD hangers. Due to the smaller dimension on this stage, the interior overhangs will be constructed in the same manner.

We are proposing to use mechanical splices for the reinforcing steel to connect the two stages together.

Attached is a drawing that shows dimensions for each stage as described above.

If you have any questions regarding this, please contact me at (314) 280-0353.

Sincerely,



Sean Kilian  
Project Manager

Asphalt Paving and Excavation

415 Old State Road • Ellisville, MO 63021  
(636) 391-8844 • FAX (636) 391-7544

9/3/2010

## VALUE ENGINEERING CHECK SHEET

### TYPE OF WORK

(Check one that applies)

- ☒ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☐ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. \_\_\_\_\_

### SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

EB BRIDGE DECK ON US 60 WILL BE REDECKED IN TWO STAGES,  
INSTEAD ~~OF~~ OF ONE. THIS WILL ALLOW WB TWO LANES TO REMAIN OPEN  
AND ONE EB LANE CLOSED DURING CONSTRUCTION, INSTEAD OF HEAD-TO-HEAD  
TRAFFIC IN WB LANES. CROSSOVER WORK WILL BE ELIMINATED.  
ONLY DRAWBACK - CALENDAR DAYS ~~WILL~~ INCREASED FROM 50 TO 75  
AND COMPLETION DATE PUSHED BACK 15 DAYS.

JPD

### SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

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